

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### **Metrigraphics Division of Dynamics Research Corporation**

#### **Massachusetts Manufacturing Extension Partnership**

#### **Lean Implementation Prepares Metrigraphics, LLC for New Focus**

##### **Client Profile:**

Metrigraphics, LLC, manufactures custom, miniaturized, high-precision components for Original Equipment Manufacturers (OEMs) around the world. Through their incredible technologies of miniaturized electroforming, photolithography and thin film sputtering, the company helps their medical, biotechnical, telecommunication, semiconductor, industrial and consumer customers improve accuracy, performance and reliability of their instruments and devices. Metrigraphics, formerly a division of Dynamic Research Corporation (DRC), was purchased in 2010 by the growth equity firms of Clarkston Merchant Partners and New England Capital Partners. The company employs 80 people at its facility in Wilmington, Massachusetts.

##### **Situation:**

Metrigraphics' President and CEO Randolph Sablich was given the task to fine tune the company into a more profitable and self sufficient organization with a market focus. Sablich knew that improving efficiency and eliminating waste in the organization would be key factors to his success. He had attended events with Lean practitioners in the past and was fearful of getting caught up in something that his company would not be able to apply. "We all needed to be doing the same things at the same time and get buy in and commitment from the entire staff," he said. The Associated Industries of Massachusetts (AIM) recommended the Massachusetts Manufacturing Extension Partnership (MassMEP), a NIST MEP network affiliate, as a resource to consider for their Lean initiative.

##### **Solution:**

MassMEP assisted Metrigraphics, LLC with their Workforce Training Funds grant application. Then MassMEP facilitated a basic Lean training event, for several company employees, to familiarize them with the Lean terms and tools. MassMEP conducted Value Stream Mapping (VSM) events using an employee team to analyze processes as they currently exist and determine how they could be done more effectively by eliminating waste. Then they implemented their ideas to reach their ideal future state. "The company began 5S (Sort, Set in Order, Shine, Standardize, Sustain) Workplace Organization in the glass cutting area and then took it throughout the facility," said Sablich. "During the 5S Kaizens, people learned to understand the subtle differences between doing 5S and simply cleaning up. 5S gave them a process that they can apply anywhere--here or at home. It gave people a different perspective on how to do this consistently in a way that makes sense to everyone and can be sustained." As a result of MassMEP's assistance, employees can walk around the facility and know where things should be because of outlines on the floor or shapes on a peg board. Visuals make it simple to understand and simple to implement.

The re-layout of a high volume product line was the focus of another Kaizen event. This came about after a large customer increased business from 35,000 to 75,000 units per week. With this kind of an increase, Metrigraphics was doing whatever they could just to keep up. This included adding machines wherever they would fit and relying on a tremendous amount of overtime. The re-layout process

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helped illustrate the benefits of cellular manufacturing which would allow one person to do multiple tasks from one location and save a huge amount of time and travel waste. They recognized that in order to be efficient, machinery and materials needed to be located nearer to each other and to the people who used them. The team utilized takt time, point of use storage, kanban signals, and other Lean tools in designing the new floor plan. Metrigraphics purchased some new material handling equipment after which an employee 5S'd the new equipment to determine where it should be located and what visuals to use. In the re-configured work cell area they are now producing 75,000 sensors per week, in less space and with the same number of people. The more efficient and more cost effective layout has made it possible for Metrigraphics to install new equipment as needed.

#### **Results:**

- \* Increased sales by \$1.7 million.
- \* Increased output by 53 percent.
- \* Reduced overtime by 50 percent.
- \* Reduced lead time by 2 days.

#### **Testimonial:**

"Mass MEP helped us embrace Lean as something with personal value. They helped us with the processes we needed to gain efficiency."

Randolph Sablich, President and CEO